CULTURAL RESOURCES SURVEY OF THE AYCOCK SCHOOL 100 kV TRANSMISSION PROJECT, CHESTER AND YORK COUNTIES, SOUTH CAROLINA

Chicora Research Contribution 594

CULTURAL RESOURCES SURVEY OF THE AYCOCK SCHOOL 100 kV TRANSMISSION PROJECT, CHESTER AND YORK COUNTIES, SOUTH CAROLINA

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MANAGEMENT SUMMARY

This report provides the results of a cultural resources investigation of an approximately 11.74 miles of corridor proposed for the use of a transmission line extending from an existing breaker station on Highway 9 in north central Chester County to the proposed Aycock substation in the south central York County. Andrew Hyder conducted the study, under the supervision of Dr. Michael Trinkley of Chicora Foundation for Mr. Tommy Jackson of Central Electric Power Cooperative. The work is intended to assist this client comply with Section 106 of the National Historic Preservation Act and the regulations codified in 36CFR800.

The corridor is to be used by Central Electric Power Cooperative for the construction of the 110kV transmission line. The proposed route will require the clearing of the corridor (although much is already in cultivated fields), followed by construction of the proposed transmission line. These activities have the potential to affect archaeological and historical sites that may be in the project corridor. For this study, an area of potential effects (APE) 100 feet around the proposed transmission line was assumed.

York County has received a comprehensive architectural survey, coupled with a variety of additional investigations. Chester County, however, has not received an intensive architectural study. Nevertheless, no architectural sites have been identified within the APE for either county. ArchSite failed to identify any previously identified archaeological sites within the corridor or the APE.

The archaeological study of the transmission line incorporated shovel testing at 100-foot intervals along the centerline of the 70-foot wide proposed corridor, which had been cut and staked at the time of this investigation. All shovel test fill was screened through ¼-inch mesh and the shovel tests were backfilled at the completion of the study. A total of 620 shovel tests were anticipated in the corridor. Because of extensive wetland areas with standing water, as well as severe slopes and gullies, only 402 were actually excavated in the survey corridor.

A local resident reported a possible cemetery in or near the substation site, which had been cleared by the time of our study. Subsequent discussions with the property owner revealed that the cemetery is thought to be on the adjacent property to the east. Neither shovel tests nor the associated pedestrian survey identified any evidence of a cemetery. Background research did identify a church on the opposite side of Orr Road in 1907, although no cemetery was identified in association.

It is possible that archaeological remains will be encountered in the project area during construction. Construction crews should be advised to report any discoveries of concentrations of artifacts (such as bottles, ceramics, or projectile points) or brick rubble to the project engineer, who should in turn report the material to the State Historic Preservation Office or to Chicora Foundation (the process of dealing with late discoveries is discussed in 36CFR800.13(b)(3)). No construction should take place in the vicinity of these late discoveries until they have been examined by an archaeologist and, if necessary, have been processed according to 36CFR800.13(b)(3).

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Introduction

This investigation was directed by Dr. Michael Trinkley of Chicora Foundation, Inc. for Mr. Tommy L. Jackson of Central Electric Power Cooperative. The work was conducted to assist Central Electric Power Cooperative to comply with Section 106 of the National Historic Preservation Act and the regulations codified in 36CFR800.

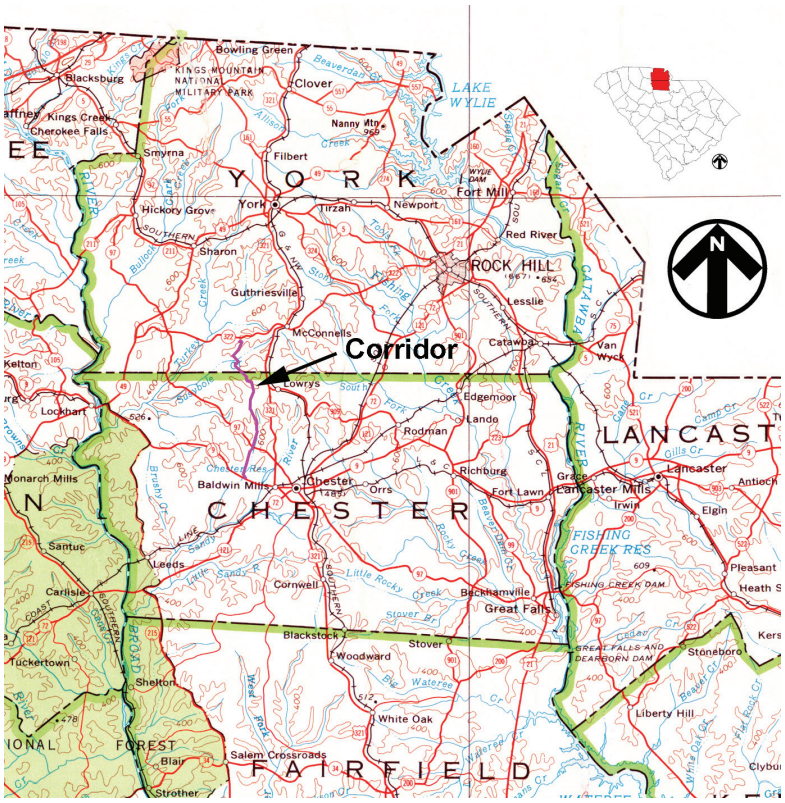

Figure 1. Survey corridor on the 1:500,000 State of South Carolina map.

The project site consists of a 11.74-mile corridor to be used for a transmission line in north central Chester and south central York counties, between the Breaker Station north of South Carolina Highway 9 and north to the existing purposed substation site on the east side of Orr Road (Figure 1).

The line extends north though agricultural, power line corridors, and woodland areas for 13,900 feet before crossing Center Road (Highway 97). From Center Road the corridor travels north through livestock fields for 10,300 feet, crossing over Connor Road. Crossing Connor Road corridor turns to the northwest and continues to travel through livestock and agricultural fields for 7,800 crossing Armenia Road. Corridor continues traveling north for 1,000 feet, then shifting northeast for 800 feet until crossing Quinn Road (S-12-142). Continuing northeast for 3,100 feet, the corridor turns northeast 3,400 crossing Rocky Creek Road. From Rock Creek Road the corridor travels 4,900 feet traveling over True Road (S-12-1002). From True road the corridor zig zag through heavily eroded forested areas for another 20,400 feet until crossing Orr Road (S-46-1348) . On the west side of Orr Road the corridor extends for 300 feet then turns south for 250 feet ending at the proposed substation (Figure 2).

The corridor exhibits very little topographic variation, with elevations ranging between about 450 and 700 feet above mean sea

Figure 2. Portion of the USGS topographic maps Tirzah, Sharon, Armenia, Lowrys, Chester, and Baton Rouge, showing the proposed corridor.

level (AMSL). The proposed line will come out of agricultural fields and enter a heavily eroded forested are at the northern portion of the corridor.

Most of the corridor has been converted to agricultural or livestock fields, although there is remnant primary and secondary vegetation along portions of the project area. The better drained areas are heavily vegetated, primarily with secondary forest.

The proposed corridor, as previously mentioned, is intended to be used as a transmission line. Landscape alteration, primarily clearing and construction, including erection of poles, will damage the ground surface and any archaeological resources that may be present in the survey area. Construction and maintenance of the transmission line may also have an impact on historic resources in the project area. The project will not directly affect any standing historic structures (since none are located on or within 100 feet of the survey corridor), but the completed facility may detract from the visual integrity of historic properties, creating what some consider discordant surroundings. As a result, this architectural survey uses an area of potential effect (APE) 100 feet around the proposed corridor. This distance was selected since the proposed corridor will use only single poles or H-frame wood poles, the corridor is primarily 75 feet in width, tree cover in some areas is heavy, there are numerous transmission lines already present, and the area has been modified by cultivation.

This study, however, does not consider any future secondary impact of the project, including increased or expanded development of this portion of Chester and York counties.

We were requested by Mr. Tommy L. Jackson of Central Electric Power Cooperative to conduct the cultural resource study in February 2019, with the field investigations conducted by Andrew Hyder, under the supervision of Dr. Michael Trinkley from March 17th through March 26th, 2019. The architectural survey and evaluations were conducted by Dr. Trinkley at this same time.

These investigations incorporated a review of ArchSite and the site files at the South Carolina Institute of Archaeology and Anthropology using an Area of Potential Effects (APE) of 100 feet. No previously identified archaeological sites were identified in the corridor, in the 100-foot APE (Figure 3).

A comprehensive architectural survey of York County was conducted between 1991 and 1993 by The Jaeger Company. No architectural sites were identified within or even adjacent to the proposed corridor. In fact, the closest is 469-0917, determined not eligible, 8,000 feet to the northwest of the substation site.

There is no comprehensive survey for Chester County, although the SHPO staff did conduct a survey that covered the Baton Rouge USGS topographic map. That survey, however, yielded no sites in the project corridor. Figure 3 reveals that there is no historic architectural site within the corridor, but in close proximity to the 100 foot APE.

Archival and historical research was limited to a review of secondary sources available in the Chicora Foundation files and at the South Caroliniana Library.

No previously recorded archaeological sites are in the 100 feet APE of the Aycock corridor.

Report production was conducted at Chicora's laboratories in Columbia, South Carolina on March 25th through 29th, 2019. The only photographic materials associated with this project are digital and will be retained by Chicora Foundation. All other field notes and the resulting collections will be curated at the South Carolina Institute of Archaeology and Anthropology.

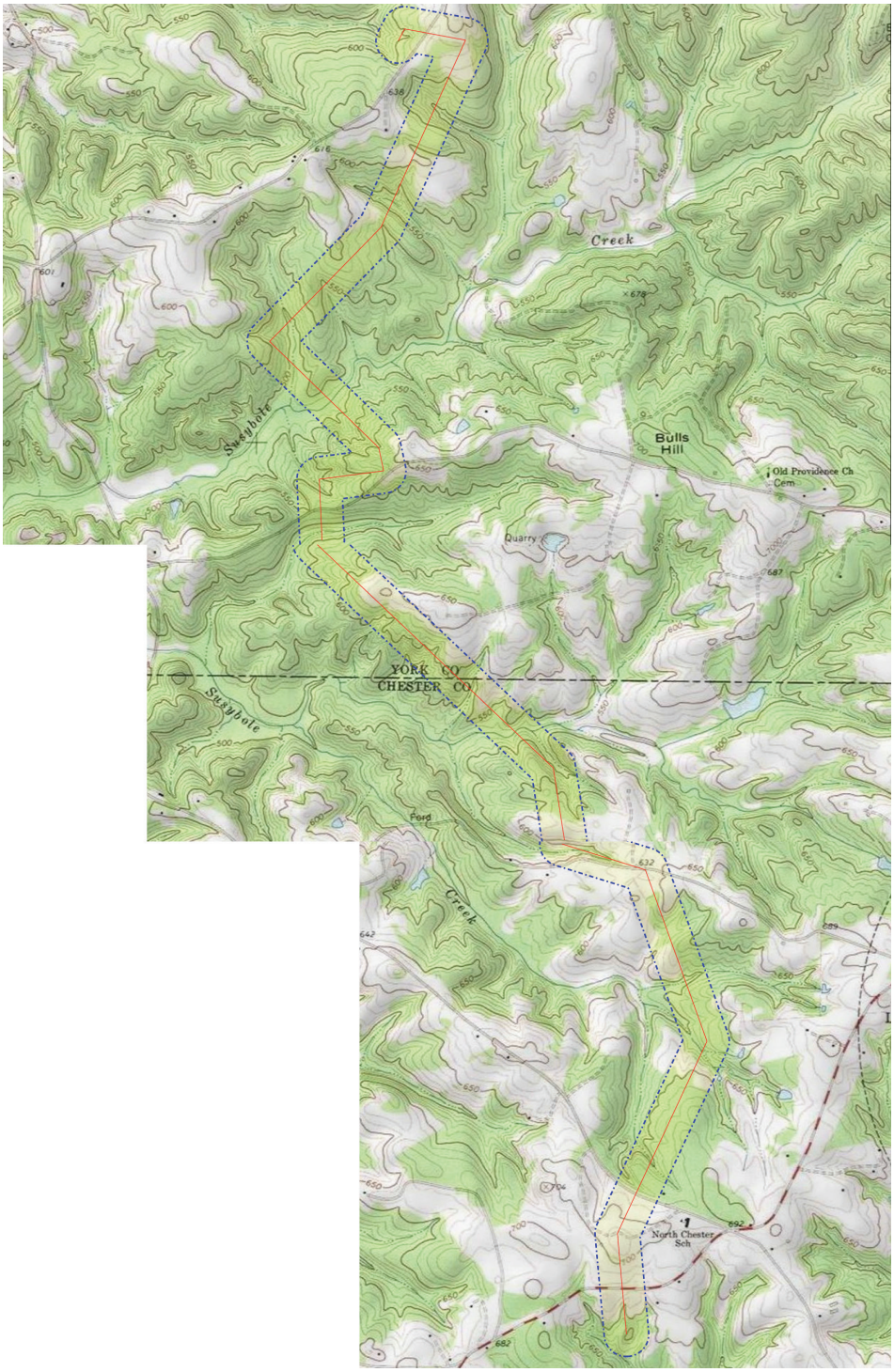

Figure 3. ArchSite map of the northern portion of the corridor.

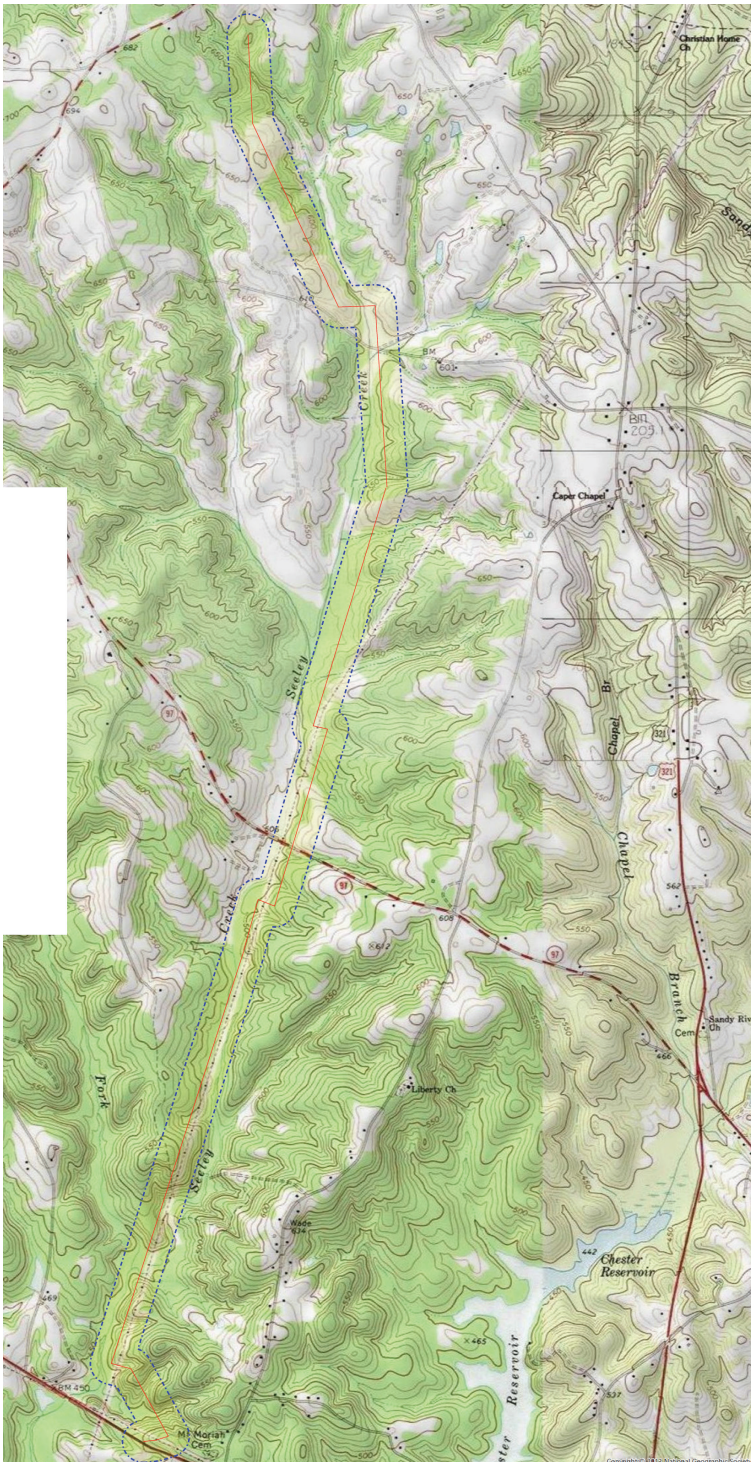

Figure 3, cont. ArchSite map of the southern portion of the corridor.

Environmental Background

Physiography and Geology

Chester and York Counties are situated in the Piedmont of South Carolina and are bounded on the east by the Catawba River, on the south by Fairfield County, on the west by the Broad River, on the north by North Carolina. The land primarily consists of gently rolling hills with elevations ranging from 270 feet above mean sea level (AMSL) by the Catawba River and 700 AMLS in upper regions of the counties (Hardee 1982:1).

The survey corridor is bounded to the east and west by these two drainages and a variety of small tributaries cross the corridor throughout its length.

The agricultural fields tend to be rolling hills and most of them exhibit some sort of natural drainage or artificial ditches channeling water to lowland areas.

As previously mentioned, Chester and York counties are made up of one broad physiographic area, often referred to the Carolina Piedmont. The surface soils are almost entirely iron-rich red clay that once had ample deposits of topsoil. Much of this soil are lost due to early historic agricultural practices, especially a lack of contour plowing and decades of planting row crops such as corn, soybeans, and cotton.

Soils

In general, the soils in this portion of Chester and York Counties are either well drained with a sand surface layer and iron rich clay subsoil or soils which are somewhat poorly to poorly drained throughout. Both associations are found in nearly level to gently sloping areas on upland terraces or small ridges. There are 10 primary soils series are found along the transmission line corridor (Table 1).

Appling Soil has good available moisture for crops, but is prone to erosion. The A horizon is between 1-1.5 feet consisting of a light brown sandy loam. B-horizon is 1.5-3 feet below the surface and consists of a yellowish brown sandy clay loam; C-horizon is a red clay soil occurring between 3-3.25 feet below surface.

Cecil Soil Series are well drained soils in uplands of the piedmont. These soils develop in weathered metamorphic and igneous rocks, such as granite and schist. The A horizon of this series is a dark brown sandy loam occurring at 1-2 feet below surface. C horizon has a grayish-yellow to red upper subsoil. The average depth to weathered bedrock is between 5 and 5.5 feet below the C-horizon.

Chewacla Soil Series are somewhat poorly drained soils that are rather deep. The A horizon occurs at 0.8-1.75 feet with is a grayish brown silty loam with some mottling with subsoils. The C-horizon is a mottled yellowish brown, dark brown or gray subsoil. Depths occur at 1.75-3 feet below the A-horizon.

Hiwassee Soil Series are found on river terraces, developed from old alluvium deposits of weathered materials and dark stones. These soils are well drained, deep, and friable. From 0.2 to 1.0 feet, soils are reddish brown to dark reddish brown in the A-horizon. Subsoils occur at about 1.7 and consisting of a red clay soils.

Madison soils are well drained and found in uplands of the piedmont on steep slopes. These soils develop in weathered metamorphic and

Table 1.
Soils types located in project corridor

Soil Symbol	Soil	%
ApB	Appling loamy sand, 2-6% slopes	5.4
CeB2	Cecil sandy loam, 2-6% slopes, moderated eroded	7.6
CeB2	Cecil sandy loam, 2-6% slopes, moderated eroded	10.8
CeC2	Cecil sandy clay loam, 6-10% slopes, moderated eroded	3.9
CfB3	Ceil clay loam, 2-6% slopes, severely eroded	8.3
CnB2	Cecil sandy clay loam, 2-6% slopes, moderately eroded	0.6
CnC2	Cecil andy clay loam, 6-10% slopes, moderately eroded	16.1
ChA	Chewacla loam, 6-10% slopes, severely eroded	0.1
Cw	Chewacla loam, 0-2% slopes, frequently flooded	2.2
HwC2	Hiwassee sandy clay loam, 6-10% slopes, eroded	0.8
MaB	Madison sandy loam, 2-6% slopes	2.4
MdC2	Madison sandy clay loam, 6-10% slopes, eroded	0.1
MdE2	Madison sandy clay loam, 10-25% slopes, eroded	0.5
MkC2	Mecklenburg sandy clay loam, 6-10% slopes, eroded	0.5
PaD2	Pacolet sandy clay loam, 10-15% slopes, moderately eroded	1.5
PaE2	Pacolet sandy loam, 10-25% slopes	9.6
PaE2	Pacolet sandy clay loam, 15-25% slopes, moderately eroded	1.0
PcD3	Pacolet clay loam, 10-15% slopes, severely eroded	1.8
PcE3	Pacolet clay loam. 15-25% slopes, severely eroded	2.5
RnF	Rion loamy sand, 15-40% slopes	5.0
To	Toccoa loam	6.7
WkD	Wilkes sandy loam, 6-15% slopes	3.4
WkF	Wilkes sandy loam, 15-40% slopes	3.3
WwE2	Wynott-Wilkes complex, 15-25% slopes, moderately eroded	0.6
WyC2	Wynott-Winnsboro complex, 6-10% slopes, moderately eroded	4.7

igneous rocks such as granite and schist. The A horizon of this series is a dark brown sandy loam occurring at 1 to 2 feet below surface. The C-horizon has a grayish-yellow to red upper subsoil. The average depth to weathered bedrock is between 5 and 5.5 feet below the C-horizon.

Mecklenburg Soil Series are well-drained piedmont soils developed from eroded stones such as hornblende, schist, gabbro, and diorite. The A Horizon is a dark brown to brown sandy loam over a B-horizon of a yellowish red to brown clay loam.

The Pacolet Soil Series consists of well-drained soils in uplands of the piedmont. These soils develop in weathered metamorphic and igneous rocks. The A horizon of this series is a dark brown sandy loam occurring at 1-2 feet below the surface. The C-horizon has a grayish-yellow to red upper subsoil.

The Rion Soil Series consists of well drained, moderately deep clay loam soils. These soils are poorly suited for crop production. The A horizon is perhaps 0.25 foot in depth, consisting of a very dark grayish brown loam. Below is B-horizon, with up to 0.6 foot of brown sandy loam. The C-horizon consists of brownish yellow sandy clay loam.

Toccoa soils are somewhat poorly drained and rather deep. The A horizon occurs at 0.8-1.75 feet and is a grayish brown silty loam with some mottling. The C-horizon is a mottled yellowish brown, dark brown or gray subsoil.

The Wilkes Series are well-drained shallow piedmont soils. The A horizon is dark brown to grayish brown sandy loam, while subsoils are yellowish red clays that are weakly developed. Most Wilkes soils lack a B-horizon.

Wynott soils consist of moderately deep, well-drained deposits. They formed in residuum from gabbro, diorite, and other dark colored mafic rocks. These soils are on uplands in the Piedmont. The A horizon of this series is a dark brown sandy loam occurring at 1-2 feet below the surface. The C-horizon has a grayish-yellow to red color.

Examination of Table 3 reveals that about 70% of the corridor consists of soils with slopes of 10% or less, while the remaining 30% exhibits soils with slopes over 10% that are less likely to contain either prehistoric or historic occupations.

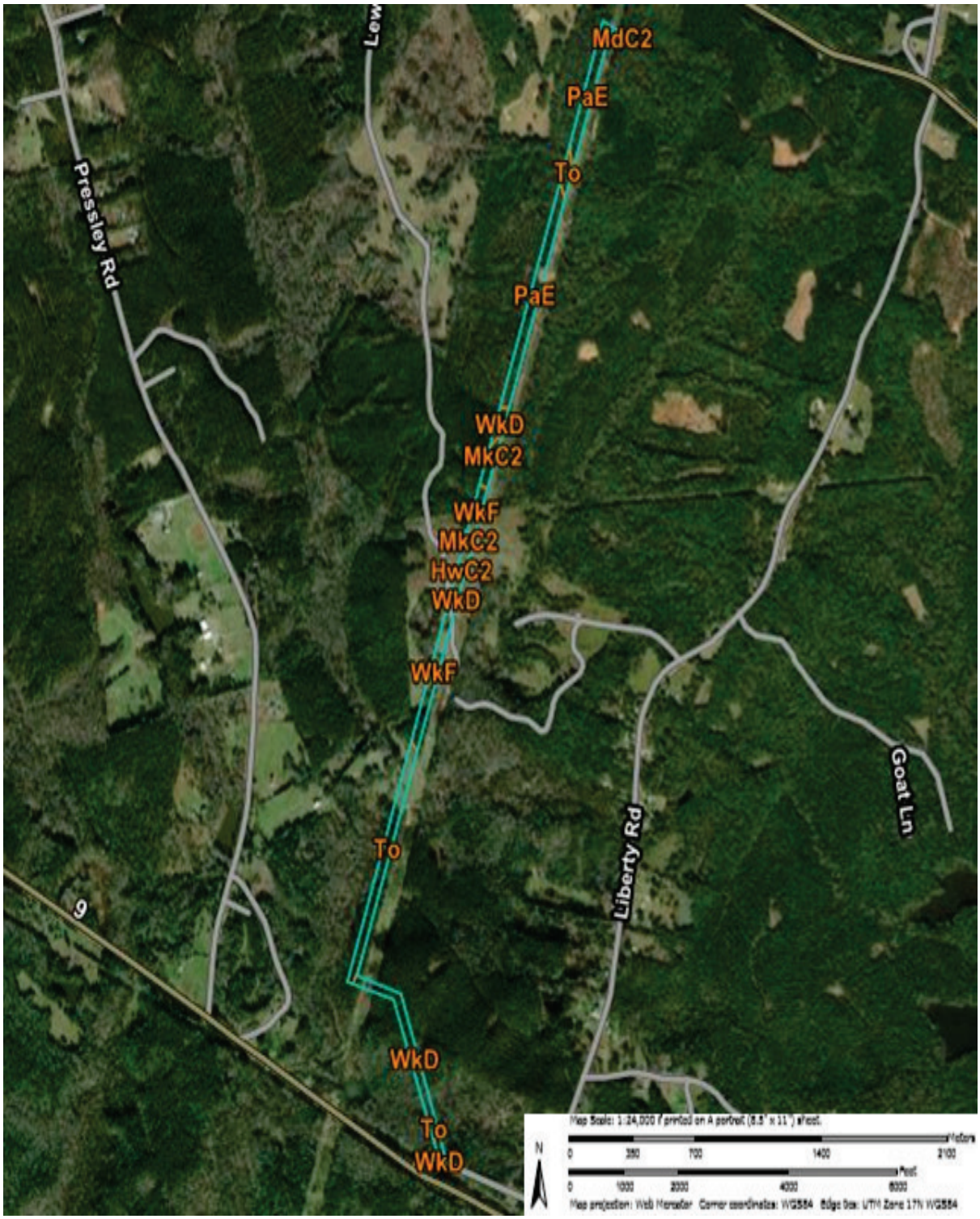

Figure 4. Soils along the project corridor.

Figure 4, cont. Soils along the project corridor.

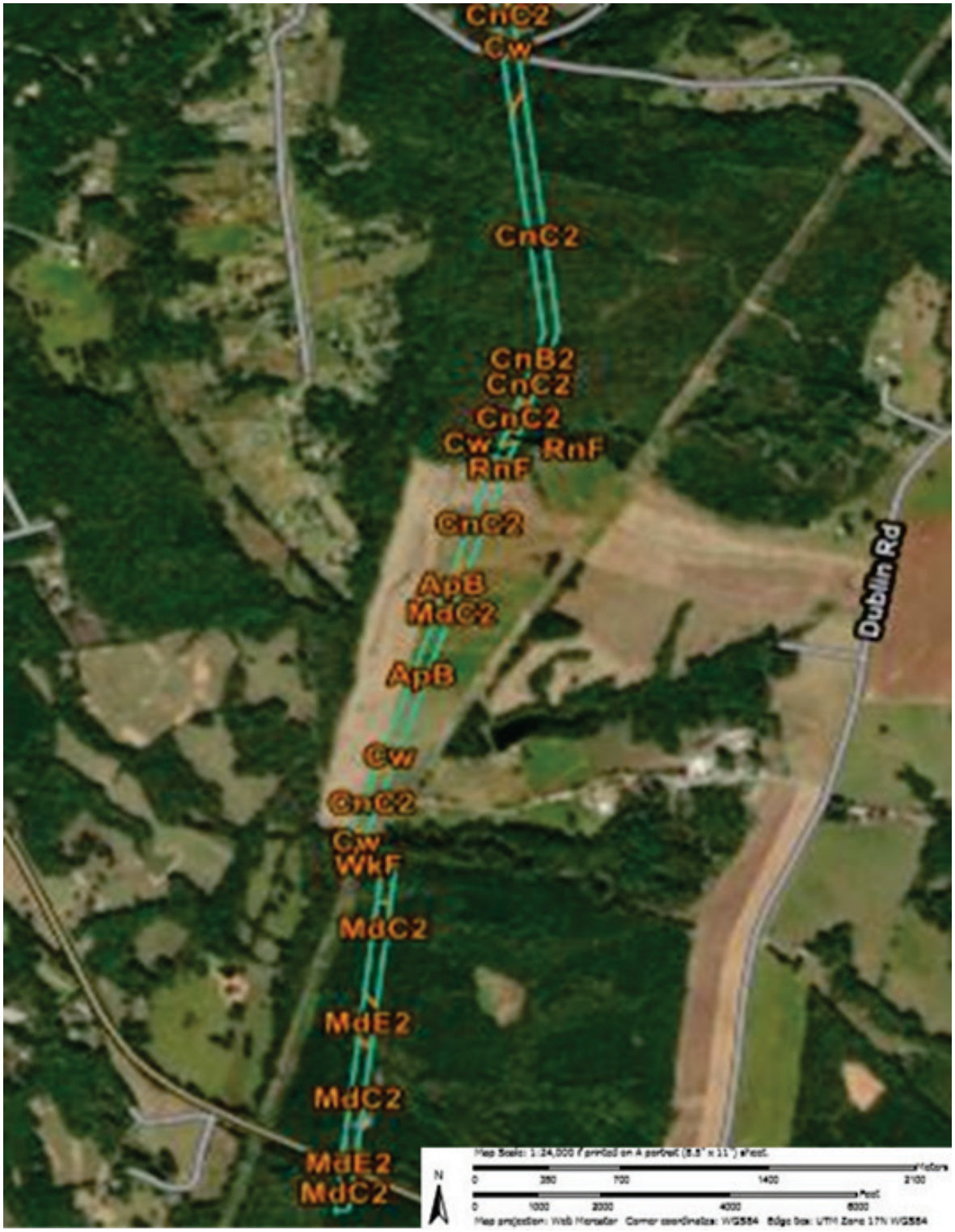

Figure 4, cont. Soils along the project corridor.

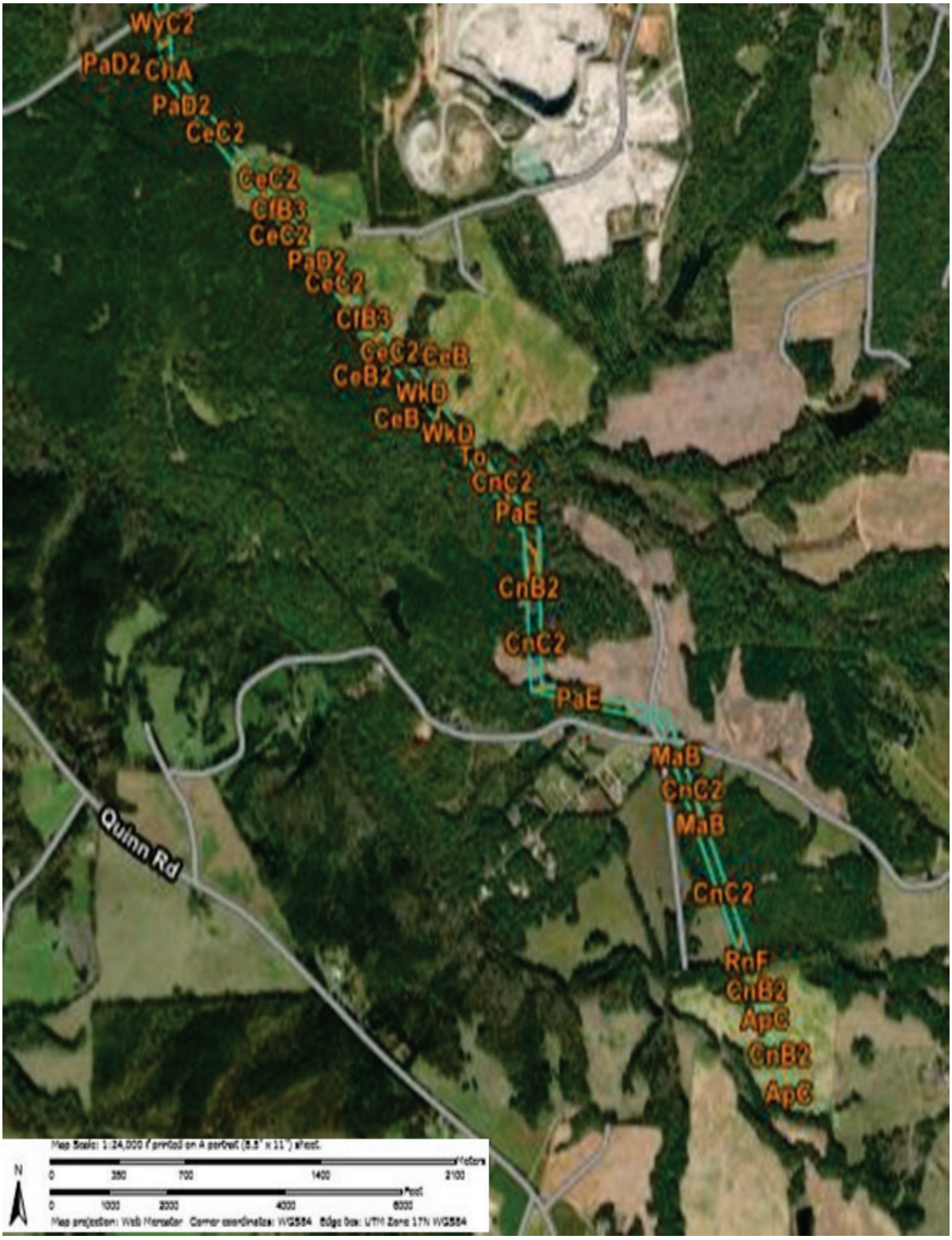

Figure 4, cont. Soils along the project corridor

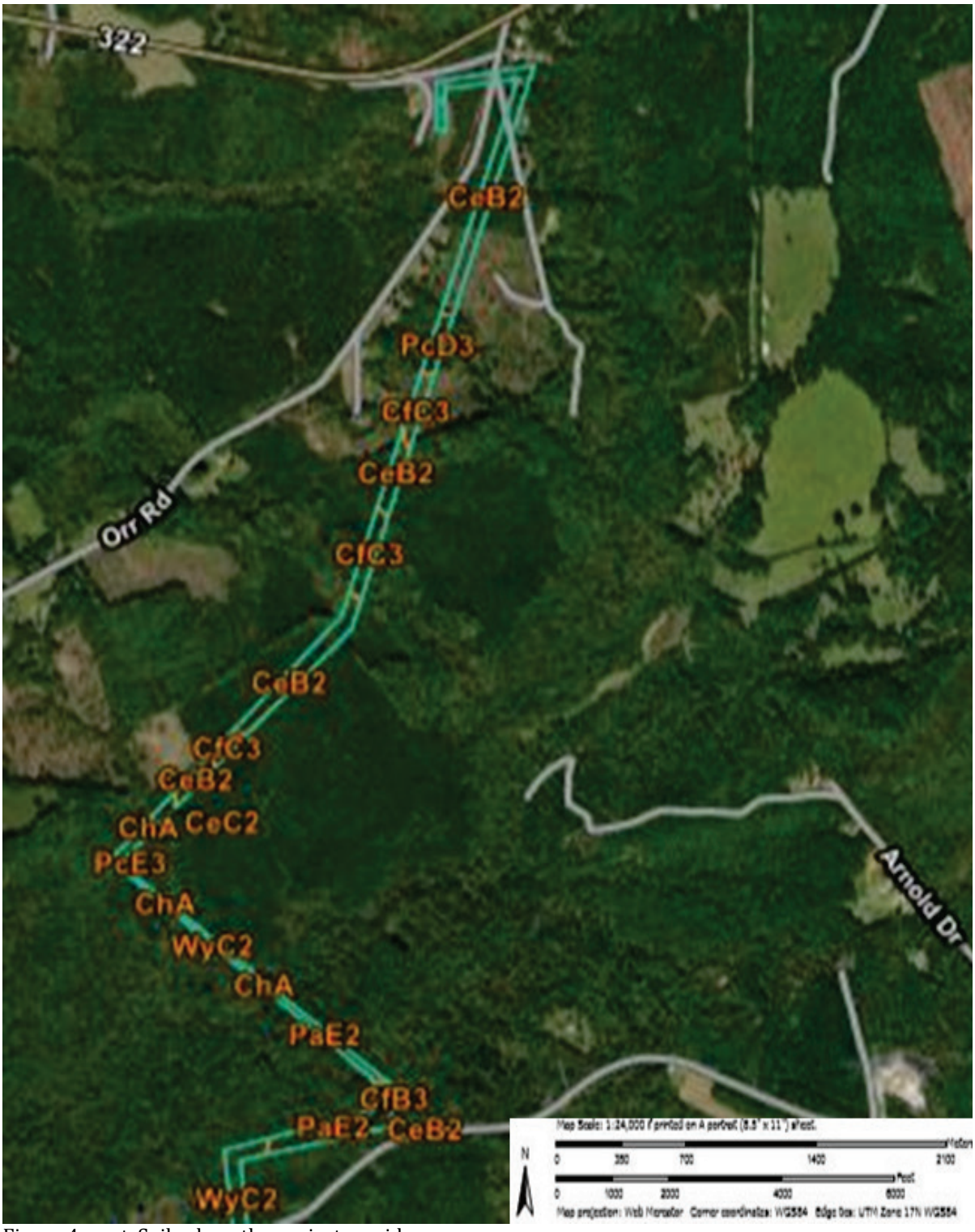

Figure 4, cont. Soils along the project corridor.

Of greater importance to our understanding of potential archaeological sites in the study area is that 57% of the soils are classified as eroded to moderately eroded. An additional 4% are classified as severely eroded and another 2% are frequently flooded.

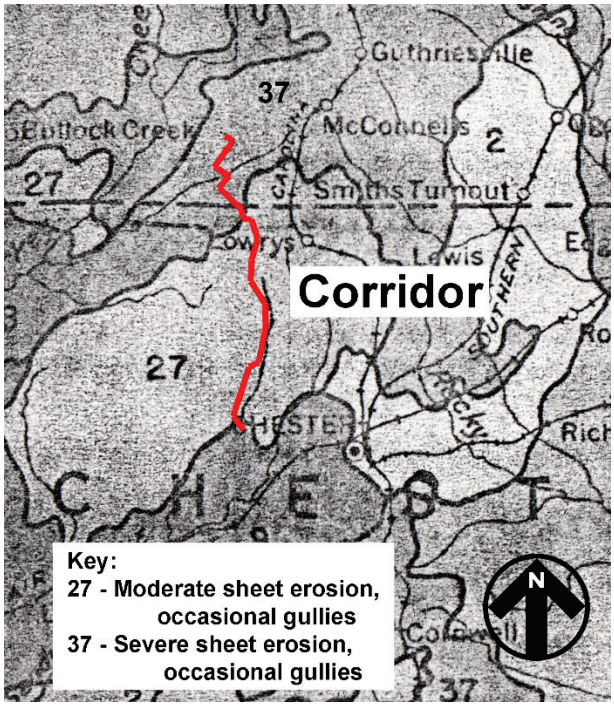

Figure 5. Portion of the 1934 *Reconnaissance Erosion Map of South Carolina* showing extensive erosion in the project area.

The 1934 *Reconnaissance Erosion Map of South Carolina* shows this area of Chester and York counties. This is consistent with Trimble (1974), who found erosion in the area of between 0.7 and 1.0 foot, because of the high antebellum erosive land use coupled with postbellum continuation typical of the cotton plantation area. In fact, many of these gullied areas are still evident today in the survey corridor.

Climate

Chester and York counties have a subtropical climate, characterized by warm summers, mild winters, and adequate precipitation evenly spread throughout the year. Except in the summer, when maritime tropical air controls the climate of the area, the daily weather patterns are controlled by west to east moving pressure systems and associated fronts.

Yearly precipitation averages 47 inches, but ranges from 39 to 55 inches. The growing season, from April to September, receives an average of 31 inches or about 66% of the yearly total. The average length of the freeze-free growing season is approximately 260 days, although frosts can occur as early as October 26 and as late as April 15 (Long 1980:46).

Mills remarked in 1826 that Carolina was similar to European climates, lying at similar latitude. He noted that,

> In comparing the climate of South Carolina, with similar climates in Europe, we find it lying under the same atmospheric influences with Aix, Rochelle, Montpelier, Lyons, Bordeaux, and other parts of France; with Milan, Turin, Padua, Mantua, and other parts of Italy (Mills 1972 [1826]:133).

Floristics

Piedmont forests generally belong to the Oak-Hickory Formation as established by Braun (1950). Regardless, the potential natural vegetation of the project area is the Oak-Hickory-Pine forest, composed of medium tall to tall forests of broadleaf deciduous and needle leaf evergreen trees (Küchler 1964). The major components of this ecosystem include hickory, shortleaf pine, loblolly pine, white oak, and post oak.

It is difficult to see any of this original forest in the survey area today since most of the corridor is in either secondary pine, scrub vegetation, or pasture.

Figure 6. Examples of heavily eroded drainages in the project corridor.

Figure 7. Examples of wetland areas throughout the corridor. Note also the rolling topography in the background of the photographs.

Figure 8. Examples of pastures. Note in the lower photograph continuing erosion, as well as the existing transmission line in the background.

Prehistoric and Historic Synthesis

Prehistoric Overview

Overviews for South Carolina's prehistory, while of differing lengths and complexity, are available in virtually every compliance report prepared. There are, in addition, some "classic" sources well worth attention, such as Joffre Coe's Formative Cultures (Coe 1964), as well as some new general overviews (such as Sassaman et al. 1990 and Goodyear and Hanson 1989). Also extremely helpful, perhaps even essential, are a handful of recent local synthetic statements, such as that offered by Sassaman and Anderson (1994) for the Middle and Late Archaic and by Anderson et al. (1992) for the Paleoindian and Early Archaic. Only a few of the many sources are included in this study, but they should be adequate to give the reader a "feel" for the area and help establish a context for the various sites identified in the study areas. For those desiring a more general synthesis, perhaps the most readable and well balanced is that offered by Judith Bense (1994), Archaeology of the Southeastern United States: Paleoindian to World War I. Figure 9 offers a generalized view of South Carolina's cultural periods.

Paleoindian Period

The Paleoindian Period, most commonly dated from about 12,000 to 10,000 B.P., is evidenced by basally thinned, side-notch projectile points; fluted, lanceolate projectile points; side scrapers; end scrapers; and drills (Coe 1964; Michie 1977; Williams 1965). Oliver (1981, 1985) has proposed to extend the Paleoindian dating in the North Carolina Piedmont to perhaps as early as 14,000 B.P., incorporating the Hardaway Side-Notched and Palmer Corner-Notched types, usually accepted as Early Archaic, as representatives of the terminal phase. This view, verbally suggested by Coe for a number of years, has considerable technological appeal.[1] Oliver suggests continuity from the Hardaway Blade through the Hardaway-Dalton to the Hardaway Side-Notched, eventually to the Palmer Side-Notched (Oliver 1985:199-200). While convincingly argued, this approach is not universally accepted.

The Paleoindian occupation, while widespread, does not appear to have been intensive. Artifacts are most frequently found along major river drainages, which Michie interprets to support the concept of an economy "oriented toward the exploitation of now extinct mega-fauna" (Michie 1977:124). Survey data for Paleoindian tools, most notably fluted points, is somewhat dated, but has been summarized by Charles and Michie (1992). They reveal a widespread distribution across the state (see also Anderson 1992b: Figure 5.1) with at least several concentrations relating to intensity of collector activity. What is clear is that points are found fairly far removed from the origin of the raw material. Charles and Michie suggest that this may "imply a geographically extensive settlement system" (Charles and Michie 1992:247).

[1] While never discussed by Coe at length, he did observe that many of the Hardaway points, especially from the lowest contexts, had facial fluting or thinning which, "in cases where the side-notches or basal portions were missing, . . . could be mistaken for fluted points of the Paleo-Indian period" (Coe 1964:64). While not an especially strong statement, it does reveal the formation of the concept. Further insight is offered by Ward's (1983:63) all too brief comments on the more recent investigations at the Hardaway site (see also Daniel 1992).

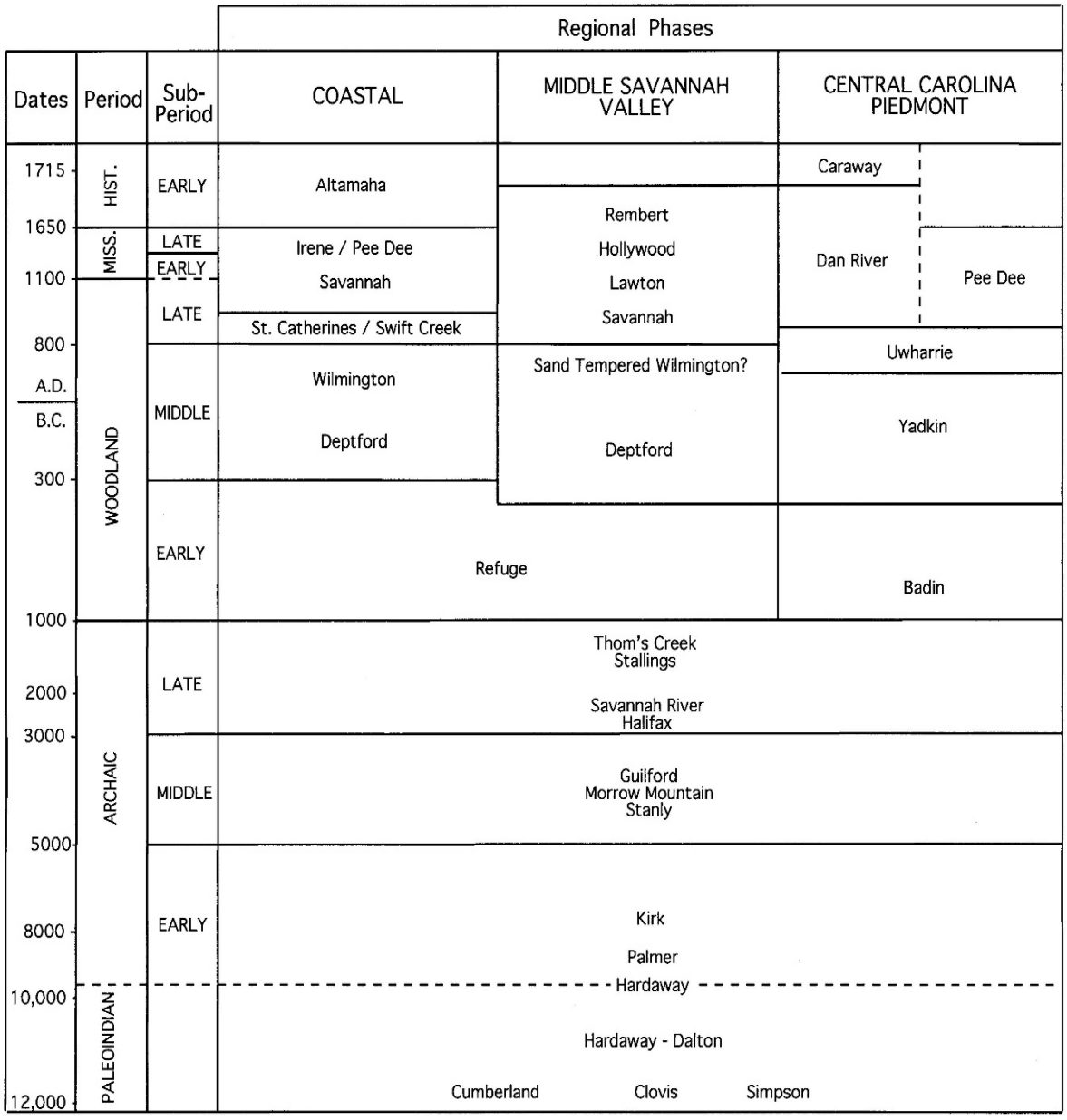

Figure 9. Generalized cultural sequences for South Carolina.

Although data are sparse, one of the more attractive theories that explains the widespread distribution of Paleoindian sites is the model tracking the replacement of a high technology forager (or HTF) adaptation by a "progressively more generalized band/microband foraging adaptation" accompanied by increasingly distinct regional traditions (perhaps reflecting movement either along or perhaps even between river drainages) (Anderson 1992b:46).

Distinctive projectile points include

lanceolates such as Clovis, Dalton, perhaps the Hardaway, and Big Sandy (Coe 1964; Phelps 1983; Oliver 1985). A temporal sequence of Paleoindian projectile points was proposed by Williams (1965:24-51), but according to Phelps (1983:18) there is little stratigraphic or chronometric evidence for it. While this is certainly true, a number of authors, such as Anderson (1992a) and Oliver (1985) have assembled impressive data sets. We are inclined to believe that while often not conclusively proven by stratigraphic excavations (and such proof may be an unreasonable expectation), there is a large body of circumstantial evidence. The weight of this evidence tends to provide considerable support.

Unfortunately, relatively little is known about Paleoindian subsistence strategies, settlement systems, or social organization (see, however, Anderson 1992b for an excellent overview and synthesis of what is known). Generally, archaeologists agree that the Paleoindian groups were at a band level of society, were nomadic, and were both hunters and foragers. While population density, based on isolated finds, is thought to have been low, Walthall suggests that toward the end of the period, "there was an increase in population density and in territoriality and that a number of new resource areas were beginning to be exploited" (Walthall 1980:30).

Archaic Period

The Archaic Period, which dates from 10,000 to 3,000 B.P.[2], does not form a sharp break with the Paleoindian Period, but is a slow transition characterized by a modern climate and an increase in the diversity of material culture. Associated with this is a reliance on a broad spectrum of small mammals, although the white tailed deer was likely the most commonly exploited animal. Archaic period assemblages, exemplified by corner-notched and broad-stemmed projectile points, are fairly common, perhaps because the swamps and drainages offered especially attractive ecotones.

Many researchers have reported data suggestive of a noticeable population increase from the Paleoindian into the Early Archaic. This has tentatively been associated with a greater emphasis on foraging. Diagnostic Early Archaic artifacts include the Kirk Corner Notched point. As previously discussed, Palmer points may be included with either the Paleoindian or the Archaic period, depending on theoretical perspective. As the climate became hotter and drier than the previous Paleoindian period, resulting in vegetational changes, it also affected settlement patterning as evidenced by a long-term Kirk phase midden deposit at the Hardaway site (Coe 1964:60). This is believed to have been the result of a change in subsistence strategies.

Settlements during the Early Archaic suggest the presence of a few very large, and apparently intensively occupied, sites that can best be considered base camps. Hardaway might be one such site. In addition, there were numerous small sites which produce only a few artifacts – these are

[2] The terminal point for the Archaic is no clearer than that for the Paleoindian and many researchers suggest a terminal date of 4,000 B.P. rather than 3,000 B.P. There is also the question of whether pottery, such as the fiber-tempered Stallings ware, will be included as Archaic, or will be included with the Woodland. Oliver, for example, argues that the inclusion of ceramics with Late Archaic attributes "complicates and confuses classification and interpretation needlessly" (Oliver 1981:20). He comments that according to the original definition of the Archaic, it "represents a preceramic horizon" and that "the presence of ceramics provides a convenient marker for separation of the Archaic and Woodland periods" (Oliver 1981:21). Others would counter that such an approach ignores cultural continuity and forces an artificial, and perhaps unrealistic, separation. Sassaman and Anderson (1994:38-44), for example, include Stallings and Thom's Creek wares in their discussion of "Late Archaic Pottery." While this issue has been of considerable importance along the Carolina and Georgia coasts, it has never affected the Piedmont, which seems to have embraced pottery far later, well into the conventional Woodland period. The importance of the issue in the nearby Sand Hills, unfortunately, is not well known.

the "network of tracks" mentioned by Ward (1983:65). The base camps produce a wide range of artifact types and raw materials that has suggested too many researchers long-term, perhaps seasonal or multi-seasonal, occupation. In contrast, the smaller sites are thought of as special purpose or foraging sites (see Ward 1983:67).

Middle Archaic (8,000 to 6,000 B.P.) diagnostic artifacts include Morrow Mountain, Guilford, Stanly, and Halifax projectile points. Much of our best information on the Middle Archaic comes from sites investigated west of the Appalachian Mountains, such as the work by Jeff Chapman and his students in the Little Tennessee River Valley (for a general overview see Chapman 1977, 1985a, 1985b). There is good evidence that Middle Archaic lithic technologies changed dramatically. End scrapers, at times associated with Paleoindian traditions, are discontinued, raw materials tend to reflect the greater use of locally available materials, and mortars are initially introduced. Associated with these technological changes there seem to also be some significant cultural modifications. Prepared burials begin to occur more commonly and storage pits are identified. The work at Middle Archaic river valley sites, with their evidence of a diverse floral and faunal subsistence base, seems to stand in stark contrast to Caldwell's Middle Archaic "Old Quartz Industry" of Georgia and the Carolinas, where axes, choppers, and ground and polished stone tools are very rare.

Among the most common of all Middle Archaic artifacts is the Morrow Mountain Stemmed projectile point that was originally divided into two varieties by Coe (1964:37,43) based primarily on the size of the blade and the stem. Morrow Mountain I points had relatively small triangular blades with short, pointed stems. Morrow Mountain II points had longer, narrower blades with long, tapered stems. Coe suggested a temporal sequence from Morrow Mountain I to Morrow Mountain II. While this has been rejected by some archaeologists, who suggest that the differences are entirely related to the life-stage of the point, the debate is far from settled and Coe has considerable support for his scenario.

The Morrow Mountain point is also important in our discussions since it represents a departure from the Carolina Stemmed Tradition. Coe has suggested that the groups responsible for the Middle Archaic Morrow Mountain (and the later Guilford points) were intrusive ("without any background" in Coe's words) into the North Carolina Piedmont, from the west, and were contemporaneous with the groups producing Stanly points (Coe 1964:122-123; see also Phelps 1983:23). Phelps, building on Coe, refers to the Morrow Mountain and Guilford as the "Western Intrusive horizon." Sassaman (1995) has recently proposed a scenario for the Morrow Mountain groups that would support this west-to-east time-transgressive process. Abbott and his colleagues, perhaps unaware of Sassaman's data, dismiss the concept, commenting that the shear distribution and number of these points "makes this position wholly untenable" (Abbott et al. 1995:9).

The controversy surrounding Morrow Mountain also includes its posited date range. Coe (1964:123) did not expect the Morrow Mountain to predate 6500 B.P., yet more recent research in Tennessee reveals a date range of about 7500 to 6500 B.P. Sassaman and Anderson (1994:24) observe that the South Carolina dates have never matched the antiquity of their more western counterparts and suggest continuation to perhaps as late as 5500 B.P. In fact, they suggest that even later dates are possible since it can often be difficult to separate Morrow Mountain and Guilford points.

A recently defined point is the MALA. The term is an acronym standing for Middle Archaic and Late Archaic, the strata in which these points were first encountered at the Pen Point site (38BR383) in Barnwell County, South Carolina (Sassaman 1985). These stemmed and notched lanceolate points were originally found in a context suggesting a single-episode event with variation not based on temporal variation. The original discussion was explicitly worded to avoid application of a typology, although as Sassaman and Anderson (1994:27) note, the "type" has

spread into more common usage. There are possible connections with both the Halifax points of North Carolina and the Benton points of the middle Tennessee River valley, while the "heartland" for the MALA appears confined to the lower middle Coastal Plain of South Carolina.

The available information has resulted in a variety of competing settlement models. Some argue for increased sedentism and a reduction of mobility (see Goodyear et al. 1979:111). Ward argues that the most appropriate model is one that includes relatively stable and sedentary hunters and gatherers "primarily adapted to the varied and rich resource base offered by the major alluvial valleys" (Ward 1983:69). While he recognizes the presence of "inter-riverine" sites, he discounts explanations that focus on seasonal rounds, suggesting, "alternative explanations . . . [including] a wide range of adaptive responses." Most importantly, he notes that:

> the seasonal transhumance model and the sedentary model are opposite ends of a continuum, and in all likelihood variations on these two themes probably existed in different regions at different times throughout the Archaic period (Ward 1983:69).

Others suggest increased mobility during the Archaic (see Cable 1982). Sassaman (1983) has suggested that the Morrow Mountain phase people had a great deal of residential mobility, based on the variety of environmental zones they are found in and the lack of site diversity. The high level of mobility, coupled with the rapid replacement of these points, may help explain the seemingly large numbers of sites with Middle Archaic assemblages. Curiously, the later Guilford phase sites are not as widely distributed, perhaps suggesting that only certain microenvironments were used (cf. Ward [1983:68-69] who would likely reject the notion that substantially different environmental zones are, in fact, represented).

Recently Abbott et al. argue for a combination of these models, noting that the almost certain increase in population levels probably resulted in a contraction of local territories. With small territories, there would have been significantly greater pressure to successfully exploit the limited resources by more frequent movement of camps. They discount the idea that these territories could have been exploited from a single base camp without horticultural technology. Abbott and his colleagues conclude, "increased residential mobility under such conditions may in fact represent a common stage in the development of sedentism" (Abbott et al. 1995:9).

From excavations at a Sand Hills site in Chesterfield County, South Carolina, Gunn and his colleague (Gunn and Wilson 1993), offer an alternative model for Middle Archaic settlement. He accepts that the uplands were desiccated from global warming, but rather than limiting occupation, this environmental change made the area more attractive for residential base camps. Gunn and Wilson suggest that the open, or fringe, habitat of the upland margins would have been attractive to a wide variety of plant and animal species.

The Late Archaic, usually dated from 6,000 to 3,000 or 4,000 B.P., is characterized by the appearance of large, square stemmed Savannah River projectile points (Coe 1964). These people continued to intensively exploit the uplands much like earlier Archaic groups with, the bulk of our data for this period coming from the Uwharrie region in North Carolina.

One of the more debated issues of the Late Archaic is the typology of the Savannah River Stemmed and its various diminutive forms. Oliver, refining Coe's (1964) original Savannah River Stemmed type and a small variant from Gaston (South 1959:153-157), developed a complete sequence of stemmed points that decrease uniformly in size through time (Oliver 1981, 1985). Specifically, he sees the progression from Savannah River Stemmed to Small Savannah River Stemmed to Gypsy Stemmed to Swannanoa from about 5000 B.P. to about 1,500 B.P. He also notes that the latter

two forms are associated with Woodland pottery.

This reconstruction is still debated with a number of archaeologists expressing concern with what they see as typological overlap and ambiguity. They point to a dearth of radiocarbon dates and good excavation contexts at the same time they express concern with the application of this typology outside the North Carolina Piedmont (see, for a synopsis, Sassaman and Anderson 1990:158-162, 1994:35).

In addition to the presence of Savannah River points, the Late Archaic also witnessed the introduction of steatite vessels (see Coe 1964:112-113; Sassaman 1993), polished and pecked stone artifacts, and grinding stones. Some also include the introduction of fiber-tempered pottery about 4000 B.P. in the Late Archaic (for a discussion see Sassaman and Anderson 1994:38-44). This innovation is of special importance along the Georgia and South Carolina coasts, but seems to have had only minimal impact in the uplands of South or North Carolina.

There is evidence that during the Late Archaic the climate began to approximate modern climatic conditions. Rainfall increased resulting in a more lush vegetation pattern. The pollen record indicates an increase in pine that reduced the oak-hickory nut masts that previously were so widespread. This change probably affected settlement patterning since nut masts were now more isolated and concentrated. From research in the Savannah River valley near Aiken, South Carolina, Sassaman has found considerable diversity in Late Archaic site types with sites occurring in virtually every upland environmental zone. He suggests that this more complex settlement pattern evolved from an increasingly complex socio-economic system. While it is unlikely that this model can be simply transferred to the Sand Hills of South Carolina without an extensive review of site data and micro-environmental data, it does demonstrate one approach to understanding the transition from Archaic to Woodland.

Woodland Period

As previously discussed, there are those who see the Woodland beginning with the introduction of pottery. Under this scenario, the Early Woodland may begin as early as 4,500 B.P. and continued to about 2,300 B.P. Diagnostics would include the small variety of the Late Archaic Savannah River Stemmed point (Oliver 1985) and pottery of the Stallings and Thoms Creek series. These sand tempered Thoms Creek wares are decorated using punctations, jab-and-drag, and incised designs (Trinkley 1976). Also potentially included are Refuge wares, also characterized by sandy paste, but often having only a plain or dentate-stamped surface (Waring 1968). Others would have the Woodland beginning about 3,000 B.P. and perhaps as late as 2,500 B.P. with the introduction of pottery that is cord-marked or fabric-impressed and suggestive of influences from northern cultures.

There remains, in South Carolina, considerable ambiguity regarding the pottery series found in the Sandhills and their association with coastal plain and piedmont types. The earliest pottery found at many sites may be called either Deptford or Yadkin, depending on the research or their inclination at any given moment.

The Deptford phase, which dates from 3050 to 1350 B.P., is best characterized by fine to coarse sandy paste pottery with a check stamped surface treatment. The Deptford settlement pattern involves both coastal and inland sites.

Inland sites such as 38AK228-W, 38LX5, 38RD60, and 38BM40 indicate the presence of an extensive Deptford occupation on the Fall Line and the Inner Coastal Plain/Sand Hills, although sandy, acidic soils preclude statements on the subsistence base (Anderson 1979; Ryan 1972; Trinkley 1980). These interior or upland Deptford sites, however, are strongly associated with the swamp terrace edge, and this environment is productive not only in nut masts, but in large mammals such as deer. Perhaps the best data concerning Deptford "base camps" comes from the Lewis-West site (38AK228-

W), where evidence of abundant food remains, storage pit features, elaborate material culture, mortuary behavior, and craft specialization has been reported (Sassaman et al. 1990:96-98; see also Sassaman 1993 for similar data recovered from 38AK157).

Further to the north and west, in the Piedmont, the Early Woodland is marked by a pottery type defined by Coe (1964:27-29) as Badin. This pottery is identified as having very fine sand in the paste with an occasional pebble. Coe identified cord-marked, fabric-marked, net-impressed, and plain surface finishes. Beyond this pottery, little is known about the makers of the Badin wares and relatively few of these sherds are reported from South Carolina sites.

Somewhat more information is available for the Middle Woodland, typically given the range of about 2,300 B.P. to 1,200 B.P. In the Piedmont and even into the Sand Hills, the dominant Middle Woodland ceramic type is typically identified as the Yadkin series. Characterized by a crushed quartz temper the pottery includes surface treatments of cord-marked, fabric-marked, and a very few linear check-stamped sherds (Coe 1964:30-32). It is regrettable that several of the seemingly "best" Yadkin sites, such as the Trestle site (31An19) explored by Peter Cooper (Ward 1983:72-73), have never been published.

Yadkin ceramics are associated with medium-sized triangular points, although Oliver (1981) suggests that a continuation of the Piedmont Stemmed Tradition to at least 1650 B.P. coexisted with this Triangular Tradition. The Yadkin in South Carolina has been best explored by research at 38SU83 in Sumter County (Blanton et al. 1986) and at 38FL249 in Florence County (Trinkley et al. 1993)

In some respects the Late Woodland (1,200 B.P. to 400 B.P.) may be characterized as a continuation of previous Middle Woodland cultural assemblages. While outside the Carolinas there were major cultural changes, such as the continued development and elaboration of agriculture, the Carolina groups settled into a lifeway not appreciably different from that observed for the previous 500-700 years. From the vantage point of the Middle Savannah Valley Sassaman and his colleagues note that, "the Late Woodland is difficult to delineate typologically from its antecedent or from the subsequent Mississippian period" (Sassaman et al. 1990:14). This situation would remain unchanged until the development of the South Appalachian Mississippian complex (see Ferguson 1971).

Historic Overview

Early settlers in Chester, around 1750, appear to be emigrants from Pennsylvania and Virginia (Mills 1972 [1826]). Chester County was named for a county in Pennsylvania from where many of the emigrants originated (Mills 1972 [1826]).

Chester County has the same boundary since at least 1785 when it was created from the Camden District. In 1791, Chester was part of the Pinckney District, while in 1800, the name was changed from Pinckney to Chester, but the boundaries stayed the same.

In 1826, Mills reports that the Chester District:

> Is well adapted to the growth of corn, wheat, rye, oats, and in short, all grains; but owing to the wretched state of its agriculture, the small grains are not a profitable crop (Mills 1972 [1826]:490).

At this time, the census of the Chester District reported 14,189 people – 9,611 whites, 4,542 slaves, and 36 free blacks. Mills' Atlas (Figure 10) shows no settlements along the project corridor; however, one mill (Pinchback's) is shown along a drainage that the corridor crosses.

Mills (1972 [1826]) praises the education system in Chester District. He describes "able

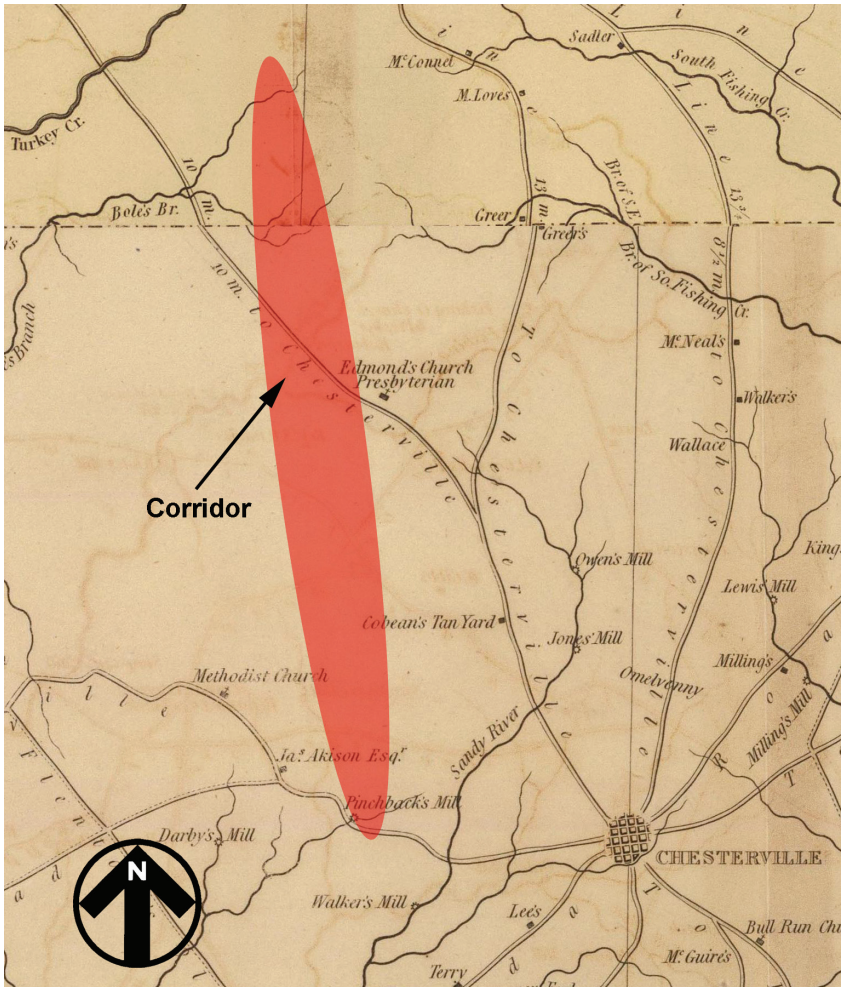

Figure 10. Mills' 1826 *Atlas* showing portions of Chester and York counties with the general corridor location

teachers" and the "excellent system" of education in the District. Overall, Mills appears to have a positive description of the District recounting "elegant" houses and people with "respectable standing" (Mills 1972 [1826]).

This feeling may have changed by 1896 when a man looking to purchase a mill in Chester County but decided against it citing,

> I was so impressed with the uninviting surroundings, lack of educational facilities and civilized society, etc., that I decided that I would not move my family down there for the whole outfit as a gift (Carlton 1982).

The population in 1850 shows a decrease in the number of whites (n=8,003), while the number of slaves (n=9,887) and free blacks (n=148) increased dramatically (DeBow 1854). However, the total population was increasing in Chester County every year.

An 1883 account reports that two cotton mills were located in Chester County (State Board of Agriculture 1883:582). Both factories were located along Fishing Creek and while not the most profitable cotton mills in the state, they still produced considerable competition to the others in the state.

The city of Chester, known as Chesterville in 1883, was the largest town in the area.

York County, part of Anson County, North Carolina in 1750, was first settled by Scotch-Irish settlers who also inhabited the counties of Chester and Lancaster. In 1763, the lands of modern York County became Mecklenburg County, North Carolina, and finally Tryon County, North Carolina. It was in 1772 when the boundary dispute between the Carolinas was settled and gave York County to South Carolina.

After the Revolution, agriculture remained as the predominant industry, although gold mining became an important industry during the nineteenth century. York County was ranked

fourth in the production of gold in the state of South Carolina (Catawba Regional Planning Council 1975). By 1826, cotton was the principal crop grown in York County with other staples of wheat, corn, rye, and tobacco also bringing money into the economy (Mills 1972 [1826]). It is also at this time that Mills reports that no other Indian settlements existed in the district except those on the Catawba River. Mills Atlas of 1825 fails to show any settlements along the project corridor (Figure 8).

The nineteenth century in York County saw a significant population increase due to the black slaves used as labor for the rising cotton market (York County Census 1860). In 1860, almost have of the County's population was slave labor (York County Census 1860). The boom in York County's economy was no doubt due to the establishment of roads and the arrival of the Charlotte and South Carolina Railroad in 1852. The line operated for ten years, bringing new goods and services to York County until it was destroyed during the Civil War (Rock Hill School District No. 3 1970).

Although only one battle, Nation Ford, was fought during the Civil War in York County, growth for the county decreased significantly. Reconstruction after the war forced many farmers to downsize their already small farms.

In 1880, the Rock Hill Cotton Factory was built to become the first steam-powered cotton factory in South Carolina. This led to an expansion of agriculture and industry and eventually led to the construction of other factories including the Anderson Automobile and the Fort Mill Manufacturing Company, which was the forerunner of Springs Industries.

York County's industry remained constant until the 1920s when the years of farming cotton began to erode the soil and destruction by the boll weevil further damaged cotton production. The Great Depression further pushed the County into stagnation.

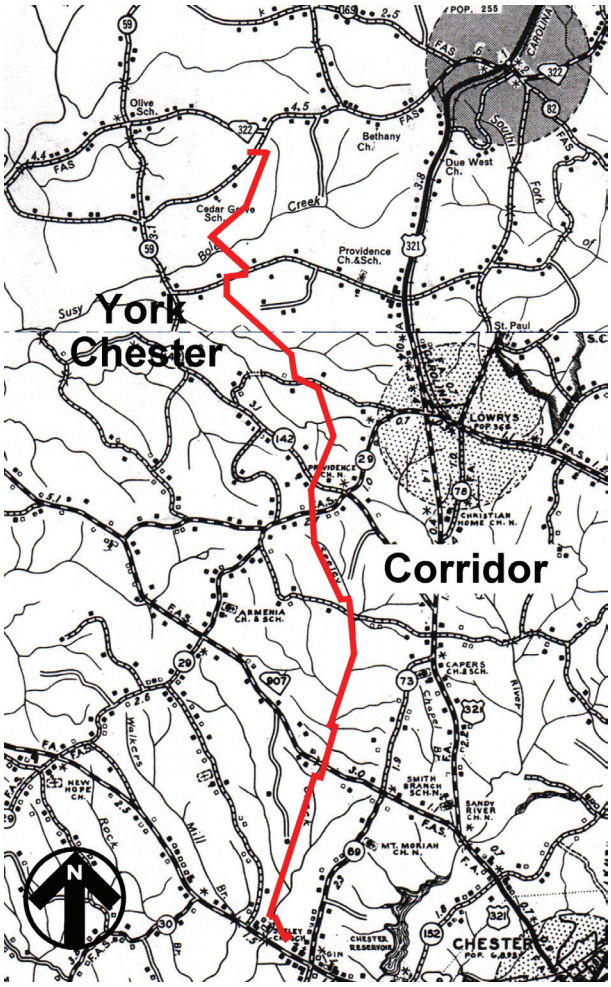

Figure 11. Portion of the Chester (1942) and York (1950) County General Highway and Transportation maps showing the project corridor.

York County became heavily dependent on industrial sites, including the Catawba Dam and Power Plant which eventually caused the establishment of the Duke Power Company that is still in use today (Kissane and Kissane 1992). A series of dams and hydroelectric facilities were constructed on the Catawba River in North and South Carolina, which revitalized the economy once again.

By 1941, York County was one of the five most industrialized counties in South Carolina

(Petty 1975). The 1942 Chester County and 1950 York County General Highway and Transportation Maps show many structures in vicinity of the project corridor (Figure 11). All of the structures are shown on roads, which the corridor follows for most of its length. No remains of these structures were found in the easement. In the early 1980s, the county ranked thirty-second in South Carolina for cash receipts from agriculture (Petty 1975) and at this time several institutions of higher learning were established to further continue the increase in York County's economy.

Previous Archaeological Investigations

Although Derting and his colleagues note a number of archaeological studies have been conducted in Chester and York counties (Derting et al. 1991), no previously recorded archaeological sites are present in the immediate study area. Likewise, the previous architectural survey (The Jaeger Company 1991-1993) failed to identify any National Register eligible structures or sites in the corridor area.

Possible Cemetery

After the conclusion of our field invesigations, a possible cemetery was reported to Central Electric Power Cooperative as being near the substation and/or Aycock school site.

We were unable to identify a cemetery on any of the available historic or topographic maps. We did not conduct a title search, although such efforts are rarely productive in any event.

We did identify a 1907 topographic map that shows an unnamed church on the south side of the road on which the substation is proposed (Figure 12). The topographic map did not, however, show any cemetery associated with the church.

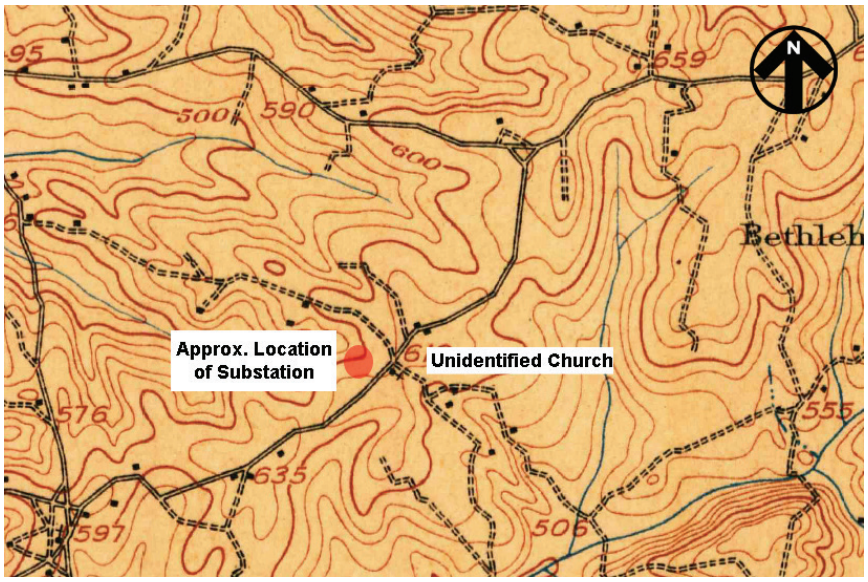

Figure 12. Portion of the 1907 Sharon USGS 15' topographic map showing an unidentified church opposite the proposed substation.

Methods

Archaeological Field Methods

The initially proposed field techniques involved the placement of shovel tests at 100-foot intervals along the centerline of the corridor, which was staked at the time of the survey. Since the corridor is only 75 feet in width, a single transect was deemed satisfactory.

All soil would be screened through ¼-inch mesh, with each test numbered sequentially along the corridor (corresponding to the station number). Each test would measure about 1 foot square and would be taken to a depth of at least 1.0 foot or until subsoil was encountered. All cultural remains would be collected, except for mortar and brick, which would be quantitatively noted in the field and discarded. Notes would be maintained for profiles at any sites encountered.

Should sites (defined by the presence of three or more artifacts from either surface survey or shovel tests within a 50 feet area) be identified, further tests would be used to obtain data on site boundaries, artifact quantity and diversity, site integrity, and temporal affiliation. For small or very recent sites, these tests would be placed at 25 to 50 feet intervals in a simple cruciform pattern until two consecutive negative shovel tests were encountered. For larger sites or sites where we felt there was a potential for National Register eligibility, shovel tests would incorporate the entire site within the project corridor. Again, shovel tests would be placed at 25 to 50 foot intervals. We are precluded from examining areas outside the corridor by the easements obtain by Central Carolina Power Cooperative.

The information required for completion of South Carolina Institute of Archaeology and Anthropology site forms would be collected and photographs would be taken, if warranted in the opinion of the field investigator.

At the proposed substation, these methods would be varied only by the placement of transects through the impact area at 100 foot intervals, with shovel tests on those transects at 100 feet.

These proposed techniques along the transect were implemented with no modifications. A total of 620 shovel tests were anticipated in the corridor. Due to the topographical variability of the landscape and wetlands areas located throughout the corridor, 402 shovel tests were excavated in the project area. The remaining tests were in wetlands, in paved areas, or on very steep slopes.

The GPS positions were taken with a WAAS enabled Garmin 76 rover that tracks up to twelve satellites, each with a separate channel that is continuously being read. The benefit of parallel channel receivers is their improved sensitivity and ability to obtain and hold a satellite lock in difficult situations, such as in forests or urban environments where signal obstruction is a frequent problem. This was a vital concern for the study area.

Architectural Survey

As previously discussed, we elected to use a 100-foot area of potential effect (APE). The architectural survey would record buildings, sites, structures, and objects that appeared to have been constructed before 1950. Typical of such projects, this survey recorded only those which have retained "some measure of its historic integrity" (Vivian 2001:5) and which were visible from public roads.

For each identified resource, we would complete a Statewide Survey Site Form and at least two representative photographs were taken. The Survey Staff of the S.C. Department of Archives and History would assign permanent control numbers at the conclusion of the study. The Site Forms for the resources identified during this study would be submitted to the S.C. Department of Archives and History.

Site Evaluation

Archaeological sites would be evaluated for further work based on the eligibility criteria for the National Register of Historic Places. Chicora Foundation only provides an opinion of National Register eligibility and the final determination is made by the lead federal agency, in consultation with the State Historic Preservation Officer at the South Carolina Department of Archives and History.

The criteria for eligibility to the National Register of Historic Places is described by 36CFR60.4, which states:

> the quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and
>
> a. that are associated with events that have made a significant contribution to the broad patterns of our history; or
>
> b. that are associated with the lives of persons significant in our past; or
>
> c. that embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
>
> d. that have yielded, or may be likely to yield, information important in prehistory or history.

National Register Bulletin 36 (Townsend et al. 1993) provides an evaluative process that contains five steps for forming a clearly defined explicit rationale for either the site's eligibility or lack of eligibility. Briefly, these steps are:

- identification of the site's data sets or categories of archaeological information such as ceramics, lithics, subsistence remains, architectural remains, or sub-surface features;

- identification of the historic context applicable to the site, providing a framework for the evaluative process;

- identification of the important research questions the site might be able to address, given the data sets and the context;

- evaluation of the site's archaeological integrity to ensure that the data sets were sufficiently well preserved to address the research questions; and

- identification of important research questions among all of those that might be asked and answered at the site.

This approach, of course, has been developed for use documenting eligibility of sites being actually nominated to the National Register of Historic Places where the evaluative process must stand alone, with relatively little reference to other documentation and where typically only one site is being considered. As a result, some aspects of the evaluative process have been summarized, but we have tried to focus on an archaeological

Figure 13. Soil stratigraphy of a typical shovel test in one of the forested areas. A light brown sandy clay B-horizon overlies the red clay C-horizon.

site's ability to address significant research topics within the context of its available data sets.

For architectural sites, the evaluative process was somewhat different. Given the relatively limited architectural data available for most of the properties, we focus on evaluating these sites using National Register Criterion C, looking at the site's "distinctive characteristics." Key to this concept is the issue of integrity. This means that the property needs to have retained, essentially intact, its physical identity from the historic period.

Particular attention would be given to the integrity of design, workmanship, and materials. Design includes the organization of space, proportion, scale, technology, ornamentation, and materials. As *National Register Bulletin* 36 observes, "Recognizability of a property, or the ability of a property to convey its significance, depends largely upon the degree to which the design of the property is intact" (Townsend et al. 1993:18). Workmanship is evidence of the artisan's labor and skill and can apply either to the entire property or to specific features of the property. Finally, materials – the physical items used on and in the property – are "of paramount importance under Criterion C" (Townsend et al. 1993:19). Integrity here is reflected by maintenance of the original material and avoidance of replacement materials.

Laboratory Analysis

The cleaning and analysis of artifacts that might be collected would be conducted in Columbia at the Chicora Foundation laboratories. Any such materials will be catalogued and accessioned for curation at the South Carolina Institute of Archaeology and Anthropology, the closest regional repository. The site forms for the identified archaeological sites will be filed with the South Carolina Institute of Archaeology and

Anthropology. Field notes from the project have been prepared for curation using archival standards and will be transferred to that agency as soon as the project is complete. Photographic materials are either digital and are not archival – they are being retained by Chicora Foundation.

Should materials be recovered requiring analysis that work will follow professionally accepted standard with a level of intensity suitable to the quantity and quality of the remains.

In general, the temporal, cultural, and typological classifications of prehistoric materials are defined by such authors as Coe (1964), Yohe (1996), Blanton et al. (1986), and Oliver et al. (1986). Historic materials, generally late nineteenth or early twentieth century, are generally classified using such authors as Jones and Sullivan (1980) for glass and Adams (1980), Bartovics (1978), and Price (1979) for ceramics.

Results and Conclusions

Results

No archaeological sites were identified in the transmission corridor or the proposed substation as a result of the survey testing.

Likewise, no structures are present in the corridor or within the defined APE. The area is entirely agricultural fields, planted pines, secondary hardwoods, gullied, or low swampy areas.

As previously mentioned, Mr. Tommy Jackson reported to us that a local resident believed the substation site was near a cemetery. Our background research identified a church across the street from the school site and the substation, but failed to document the presence of a cemetery. Of course, cemeteries are often not found on maps. In addition, this survey did not involve a title search. However, the right-of-way documents and associated permissions do not mention a cemetery.

Figure 14. View of the proposed substation location, looking north from Orr Road.

The substation site had been logged prior to our survey (Figure 14) and during the survey, there remained much downed timber. Nevertheless, neither the shovel tests nor the associated pedestrian survey identified anything suggestive of a cemetery, such as fragments of commercial marble or concrete stones, casket hardware, or human remains.

Examination of a 1994 aerial photograph (Figure 15) reveals that the entire site was in planted pines, with clearly distinct planting rows. These rows appear to cover the substation. If so, it seems likely that any cemetery would have been impacted by the planting over 25 years ago (if not the current logging operations.

We visited the substation area, speaking with Mr. and Mrs. William Orr, at 1629 Orr Road, directly across from the substation. They reported that they had been told of a cemetery by the Meeks descendants, the Gordons. Their understanding is that the cemetery was located somewhere on the Meeks property.

The proposed line does run along the edge of the Meeks property (today

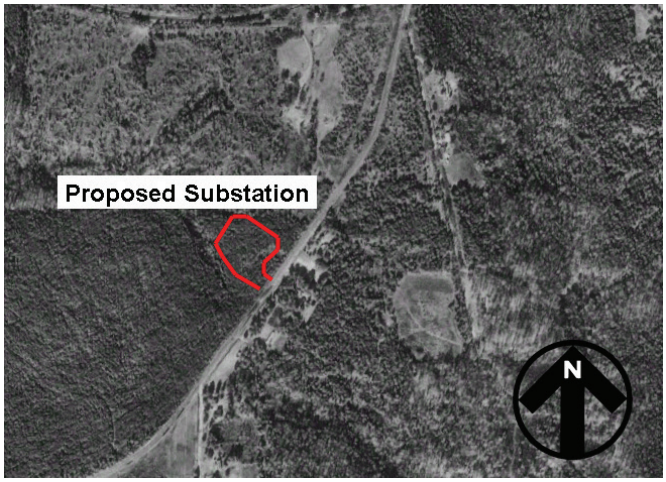

Figure 15. Portions of aerial photography for the posited cemetery area from 1994.

Gordon) for about 900 feet, before turning to the west and entering the proposed substation lot. The bulk of the Meeks property, however, extends to the east, south, and north of the corridor.

Our shovel tests on the corridor through the Meeks property failed to identify anything unusual. Consequently, we can identify no physical evidence for the presence of a cemetery, although the current level of investigations cannot rule it out.

Conclusions

This study involved the examination of approximately 11.74 miles of corridor proposed for the use of a transmission line extending from an existing breaker station on Highway 9 in north central Chester County to the proposed Aycock substation in the south central York County. This report, conducted for Mr. Tommy Jackson of Central Electric Power Cooperative, provides the results of the investigation and is intended to assist the company comply with their historic preservation responsibilities.

The South Carolina Department of Archives and History GIS was consulted to check for any NRHP buildings, districts, structures, sites, or objects in the study area. None is identified in the survey corridor or in the 100-foot APE around the corridor.

The current field studies (consisting of shovel testing at 100-foot intervals along the 75-foot wide corridor) identified no archaeological sites. Nor are there any standing historic structures within the corridor or within 100-feet.

It has been suggested that a cemetery may be located in the vicinity of the substation site. Our archaeological survey, using standard shovel testing methodology coupled with a pedestrian survey, failed to provide any indications. Our background research focused on historic maps identified a church across Orr Road, but no indications of a cemetery. We are, however, unable to eliminate conclusively the possibility that a cemetery existed at some point. Future identification may require correspondence with the Gordon family to acquire more explicit directions as well as an intensive survey of the property.

It is possible that archaeological remains will be encountered in the area during construction. As always, the utility's contractors should be advised to report any discoveries of concentrations of artifacts (such as bottles, ceramics, or projectile points) or brick rubble to the project engineer, who should in turn report the material to the State Historic Preservation Office, or Chicora Foundation (the process of dealing with late discoveries is discussed in 36CFR800.13(b)(3)). No further land altering activities should take place in the vicinity of these discoveries until they have been examined by an archaeologist and, if necessary, have been processed according to 36CFR800.13(b)(3).

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